

Application No. 10/634,381  
Response to Office Action

Customer No. 01933

Listing of Claims:

1. (Original) An image forming apparatus comprising:  
a recording head unit in which a plurality of recording  
heads are arranged in substantially the same direction as an  
arranging direction of recording elements such that an overlapped  
region is formed between the heads;

5 a detector which detects a width of the overlapped region of  
each of said plurality of recording heads from a predetermined  
test chart printed using the recording head unit; and

10 an image data distributor which distributes image data input  
to each of said plurality of recording heads, in accordance with  
the detected width of the overlapped region between the heads.

Claim 2 (Canceled).

3. (Original) An image forming apparatus comprising:  
a recording head unit in which a plurality of recording  
heads are arranged in substantially the same direction as an  
arranging direction of recording elements such that an overlapped  
region is formed between the heads;

5 a detector which detects a set angle and a width of the  
overlapped region of each of said plurality of recording heads

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from a predetermined test chart printed using the recording head unit;

10       an image data distributor which distributes image data input to each of said plurality of recording heads, in accordance with the detected width of the overlapped region between the heads; and

15       a driving timing correction unit which, when driving the recording elements of each of said plurality of recording heads in accordance with the distributed image data, corrects a driving timing of each recording element in accordance with the detected set angle.

4. (Original) An image forming apparatus according to claim 1, further comprising a notification unit which, if the detected width of the overlapped region of one of said plurality of recording heads exceeds a predetermined allowable range, 5 notifies a message demanding replacement or adjustment of the recording head.

Claim 5 (Canceled).

6. (Original) An image forming apparatus according to claim 3, further comprising a notification unit which, if at

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least one of the detected set angle and the detected width of the overlapped region of one of said plurality of recording heads 5 exceeds a predetermined allowable range, notifies a message demanding replacement or adjustment of the recording head.

7. (Original) An image forming apparatus according to claim 1, wherein if at least one of said plurality of recording heads is replaced or adjusted, a predetermined test chart is printed, and the width of the overlapped region of each of said 5 plurality of recording heads is detected again from the printed test chart.

Claim 8 (Canceled).

9. (Original) An image forming apparatus according to claim 3, wherein if at least one of said plurality of recording heads is replaced or adjusted, a predetermined test chart is printed, and at least one of the set angle and the width of the overlapped region of each of said plurality of recording heads is 5 detected again from the printed test chart.

10. (Original) An image forming apparatus according to claim 1, wherein whether image data which corresponds to the overlapped region between the heads is a line image is

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determined, and, if the image data is found to be a line image,  
5 the image data is so distributed that no complementary printing  
is performed in the overlapped region.

11. (Original) An image forming apparatus according to  
claim 3, wherein whether image data which corresponds to the  
overlapped region between the heads is a line image is  
determined, and, if the image data is found to be a line image,  
5 the image data is so distributed that no complementary printing  
is performed in the overlapped region.

12. (Original) An image forming apparatus according to  
claim 1, wherein a plurality of said recording head units are  
provided in correspondence with different color outputs.

Claim 13 (Canceled).

14. (Original) An image forming apparatus according to  
claim 3, wherein a plurality of said recording head units are  
provided in correspondence with different color outputs.